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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,494	09/15/2003	Takashi Ichikawa	1018.1183101	9202
28075	7590	01/11/2006	EXAMINER	
CROMPTON, SEAGER & TUFTE, LLC			AU, SCOTT D	
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SUITE 800			PAPER NUMBER	
MINNEAPOLIS, MN 55403-2420			2635	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,494

Applicant(s)

ICHIKAWA ET AL.

Examiner

Scott Au

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to applicant's response to an Amendment, which is filed October 24, 2005.

An amendment to the claims 1-13 have been entered and made of record in the Application of Ichikawa et al. for a "Door opening and closing apparatus" filed September 15, 2003.

Claims 1-15 are pending.

The new claims 14-15 introduced.

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,6-9 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linde et al. (US# 5,497,641) in view of Vogeles (US# 6,181,254) and Ohta et al. (US# 6,304,168).

Referring to claim 1, Linde et al. disclose a door opening and closing apparatus for a vehicle that includes an electric actuator (6) (i.e. control element) for electrically operating a door latch (2) (i.e. latch), wherein the electric actuator (6) (i.e. control element) driven by power of a battery (13) (i.e. battery), the apparatus comprising (col. 2 line 66 to col. 3 line 58): a portable device (11) (i.e. portable key) held by a user, wherein the portable device (11) (i.e. portable key) wirelessly transmits an ID signal, which includes an ID code; a power generation mechanism (i.e. see the elements of Figure available), which generates power in according with a manual operation (col. 3 lines 40-50); and a communication control unit (9) (i.e. control unit), which is driven by power of the battery (13) (i.e. battery), and wherein, when the voltage of the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), the communication control unit (9) (i.e. control unit) permits the electric actuator (6) (i.e. control element) to be driven based on the condition that is met that power required for driving the electric actuator (6) (i.e. control element) is obtained by the power generation mechanism (i.e. see the elements of Figure available) (col. 3 lines 1-58; see Figure available).

However, Linde et al. did not explicitly disclose wherein the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other, wherein the communication control unit is

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capable of wirelessly transmitting a request signal when the battery has enough power to drive the electric actuator, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and wherein, when the voltage of the battery is below the level needed to drive the electric actuator, the communication control unit does not transmit the request signal until power required for driving the electric actuator is obtained by the power generation mechanism.

In the same field of endeavor of vehicle operating system, Vogele discloses the communication control unit (80) (i.e. microcomputer of the vehicle receiver) compares the ID code transmitted from the portable device with an ID code stored in the communication control unit (80) in advance, wherein the communication control unit (80) permits the electric actuator (i.e. vehicle door system) to be driven only when the condition is met that the ID codes coincide with each other (col. 3 lines 15-20; see Figures 2 and 4).

One ordinary skill in the art understands that the (80) microcomputer of the vehicle receiver compares the ID code transmitted from the portable device with an ID code stored in the (80) microcomputer in advance, wherein the (80) microcomputer permits the vehicle door units to be driven only when the condition is met that the ID codes coincide with each other of Vogele is desirable in the vehicle security system of Linde et al. because Linde et al. suggest portable device (11) communicates with vehicle receiver to perform door lock system (col. 3 lines 1-23) and Vogele suggests further the ID of the transmitter is being compared at the vehicle receiver unit (col. 3 lines 15-20). Therefore, it would have been obvious to a person of ordinary skill in the

art at the time of the invention was made to include the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other of Vogele in the vehicle security system of Linde et al. with the motivation for doing so would allow the performance of unlocking function.

However, Linde et al. in view of Vogele did not explicitly disclose the communication control unit is capable of wirelessly transmitting a request signal when the battery has enough power to drive the electric actuator, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and wherein, when the voltage of the battery is below the level needed to drive the electric actuator, the communication control unit does not transmit the request signal until power required for driving the electric actuator is obtained by the power generation mechanism.

In the same field of endeavor of vehicle operating system, Ohta et al. teach the communication control unit is capable of wirelessly transmitting a request signal with power from battery 54, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and the battery 54 provided enough power to control unit (30) in order to transmit the request signal (col. 3 lines 32-46, col. 8 lines 24-29 and col. 9 lines 10-16; see Figure 8b).

One ordinary skill in the art understands that the communication control unit is capable of wirelessly transmitting a request signal with power from battery 54, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal,

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and the battery 54 provided enough power for the communication of Ohta et al. is desirable in the vehicle security system of Linde et al. in view of Vogele because Linde et al. suggest the vehicle unit is operative through the energy accumulator (14) when battery 13 is discharged (col. 3 lines 30-50) and Ohta et al. disclose a transmitter 26 transmitting a request signal to the portable device (10) and receiving a return signal from the portable device (10) in order for the controller 31 to carry out the desire function. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to the communication control unit is capable of wirelessly transmitting a request signal with power from battery 54, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and the battery 54 provided enough power to control unit (30) of Ohta et al. in the vehicle security unit of Linde et al. in view of Vogele with the motivation for doing so would provide power to carry out the communication between the portable device and the vehicle unit.

Referring to claim 8, Linde et al. disclose a door opening and closing apparatus for a vehicle that includes an electric actuator (6) (i.e. control element) for electrically operating a door latch (2) (i.e. latch), wherein the electric actuator (6) (i.e. control element) is driven by power a battery (13) (i.e. battery), the apparatus comprising: a portable device (11) (i.e. portable key) held by a user, wherein the portable device (11) (i.e. portable key) wirelessly transmits an ID signal, which includes an ID code; a manipulation member (16) (i.e. door handle), which is manipulated to selectively open

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and close a door; a power generation mechanism (i.e. see the elements of Figure available), which generates power in accordance with a manipulation of the manipulation member (16) (i.e. door handle); a detection device (15) (i.e. switch) for detecting whether the manipulation member (16) (i.e. door handle) has been manipulated; and a communication control unit (9) (i.e. control unit), which is driven by power of the battery (13) (i.e. battery), and that the manipulation member (16) (i.e. door handle) has been manipulated based on a detection signal from the detection device (15) (i.e. switch), and wherein, when the voltage of the battery (13) (i.e. battery) is below a level needed to drive the electric actuator (6) (i.e. control element), the communication control unit (9) (i.e. control unit) permits the electric actuator (6) (i.e. control element) to be driven based on the manipulation member (16) (i.e. door handle) has been manipulated that is met the power required for driving the electric actuator (6) (i.e. control element) is obtained by the power generation mechanism (col. 2 line 66 to col. 3 line 58; see Figure available).

However, Linde et al. did not explicitly disclose wherein the communication control unit compares the ID code transmitted from the portable device with an ID code stored in the communication control unit in advance, wherein the communication control unit permits the electric actuator to be driven only when the condition is met that the ID codes coincide with each other, wherein the communication control unit is capable of wirelessly transmitting a request signal when the battery has enough power to drive the electric actuator, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and wherein, when the voltage of the battery

is below the level needed to drive the electric actuator, the communication control unit does not transmit the request signal until power required for driving the electric actuator is obtained by the power generation mechanism.

In the same field of endeavor of vehicle operating system, Vogele discloses the communication control unit (80) (i.e. microcomputer of the vehicle receiver) compares the ID code transmitted from the portable device with an ID code stored in the communication control unit (80) in advance, wherein the communication control unit (80) permits the electric actuator (i.e. vehicle door system) to be driven only when the condition is met that the ID codes coincide with each other (col. 3 lines 15-20; see Figures 2 and 4).

In the same field of endeavor of vehicle operating system, Ohta et al. teach the communication control unit is capable of wirelessly transmitting a request signal with power from battery 54, wherein the portable device wirelessly transmits the ID signal upon receipt of the request signal, and the battery 54 provided enough power to control unit (30) in order to transmit the request signal (col. 3 lines 32-46, col. 8 lines 24-29 and col. 9 lines 10-16; see Figure 8b).

It would have been obvious to provide the comparison of ID at the receiver unit and transmitting a request signal to the portable device for the same reason with respect to claim 1 above.

Referring to claim 2, Linde et al. in view of Vogeles and Ohta et al. disclose the door opening and closing apparatus according to claim 1, Linde et al. disclose further comprising a manipulation member (16) (i.e. door handle), which is manipulated to selectively open and close a door, wherein the power generation mechanism generates power in accordance with manipulation of the manipulation member (col. 3 lines 40-46).

Referring to claims 3 and 9, Linde et al. in view of Vogeles and Ohta et al. disclose the door opening and closing apparatus according to claims 1 and 8. Linde et al. disclose the energy generator (17) is connected to the door handle (16) and the energy is generated when the door handle is operated. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the manipulation member (16) (i.e. door handle) is repeatedly manipulated or manipulated once will have the same end result (col. 3 lines 40-52).

Referring to claims 6 and 12, Linde et al. in view of Vogeles and Ohta et al. disclose the door opening and closing apparatus according to claims 1 and 8, Linde et al. disclose further comprising a monitor (9) (i.e. electronic control system) for monitoring whether the battery has enough power for driving the electric actuator (col. 3 lines 28-35).

Referring to claims 7 and 13, Linde et al. in view of Vogeles and Ohta et al. disclose the door opening and closing apparatus according to claims 1 and 12, it is

inherent that Linde et al. disclose the communication control unit (9) (i.e. electronic control system) determines whether the battery has power needed to drive the electric actuator based on a signal from the monitor.

Referring to claims 14 and 15, Linde et al. in view of Vogele and Ohta et al. disclose the door opening and closing apparatus according to claims 6 and 12. Linde et al. disclose wherein the monitor sends a power supply signal to the communication unit when the battery has enough power for driving the electric actuator (col. 3 lines 28-35), Ohta et al. disclose wherein the communication control unit is capable of wireless transmitting the request signal when receiving the power supply signal, and wherein, when not receiving the power supply signal, the communication control unit does not transmit the request signal until power required for driving the electric actuator is obtained by the power generation mechanism (54) (i.e. battery) (col. 3 lines 33-47).

Claims 4-5 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linde et al. (US# 5,497,641) in view of Vogele (US# 6,181,254) and Ohta et al. (US# 6,304,168) as applied to claim 1 above, and further in view of Yamazake et al. (US# 5,899,828).

Referring to claims 4-5 and 10-11, Linde et al. in view of Vogele and Ohta et al. disclose the door opening and closing apparatus according to claims 1 and 8. Linde et al. disclose the energy generator (17) is connected to the door handle (16) and the

energy is generated and stored in the energy accumulator (14) when the door handle is operated. However, Linde et al. in view of Vogele and Ohta et al. did not explicitly disclose the power being generated and stored in a battery.

In the same field of endeavor of vehicle system, Yamazaki et al. disclose the power being generated and stored in a battery (col. 2 lines 51-57, col. 3 lines 29-34 and col. 11 lines 53-63).

One ordinary skill in the art understands that the power being generated and stored in a battery of Yamazaki et al. is desirable in the vehicle security system of Linde et al. in view of Vogele and Ohta et al. because Linde et al. suggest the energy generator (17) is connected to the door handle (16) and the energy is generated and stored in the energy accumulator (14) when the door handle is operated (col. 3 lines 40-52) and Yamazaki et al. suggest the electric power generated by the generator may be stored in a storage battery in a vehicle (col. 2 lines 51-57). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to include the power being generated and stored in a battery of Yamazaki et al. in the vehicle security system of Linde et al. in view of Vogele and Ohta et al. with the motivation for doing so would allow the use of fuel reduction in engine controller.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Au whose telephone number is (571) 272-3063. The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (571) 272-3068. The fax phone numbers for the organization where this application or proceeding is assigned are (571)-273-8300.

Scott Au
1/6/06

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Michael Horabik